ABSTRACT OF THE DISCLOSURE

An image forming device includes a power source with a forward transfer bias circuit for applying a forward transfer bias to the transfer roller based on a detected resistance Z, during image transfer, and a reverse transfer bias circuit for applying a reverse transfer bias during a cleaning operation, both through constant current control, both circuits connected in series. During constant current control, the forward transfer bias circuit detects the resistance value Z on the transfer roller using the equation $Z=(\alpha Ve - Ri_1)/i_1$, where α is the ratio of voltages in the secondary winding and auxiliary winding in the transformer of a forward transfer booster/rectifying and smoothing circuit, Ve is the output voltage from a forward transfer output voltage detecting circuit, R is the resistance in a discharge resistor of a reverse transfer booster/rectifying and smoothing circuit, and i_1 is the constant current setting.